

Starting out on the right foot

Much has been made of western companies setting the pace for using recycled materials and environmentally friendly methods of manufacture. This is of course not entirely true. Anyone who has spent any time in India, for example, will have witnessed at first hand the ingenious ways in which everything possible is recycled. In fact, we all used to recycle until some of us in the west became too affluent to bother.

With regard to environmentally friendly manufacturing methods and providing optimum factory conditions for employees the situation is unfortunately only too often still true and some companies in Asia have attracted adverse criticism. Indeed, some of the western brands using them as subcontractors have also been less

than diligent in their responsibilities. An exception is Chinese company Great Lotus.

Great Lotus is a very young company having been in existence for only five years. Nevertheless, in this short space of time, it has grown rapidly and become a major producer of comfort inserts and footbeds using open cell urethane foam technology. It supplies both leading footwear brands as well as direct to consumers and has a strong customer base in western markets. It has done this without cutting corners; on the contrary, it has gone out of its way to produce top quality, high performance products using the most sustainable and environmentally friendly methods possible.

General Manager Lillian Wu says: "Our philosophy is that factors such as a restricted substance list, factory safety,

environmental conscientiousness, correct management attitude, and employee health, remuneration and conditions are essential considerations in how we are perceived by our customers and for our long term success. By adhering closely to these practices, we have consistently met customer requirements for factory audits and inspections."

Great Lotus uses its own R&D department to create the formulae for its range of special high density, breathable, moisture wicking and antibacterial foams it uses in its finished products. Working this way also enables the company to constantly refine and improve performance of these foams in response to customer feedback. In fact, it actively seeks their input and suggestions in the development of future products.



PHOTO CREDIT: GREAT LOTUS



Roll sheet. PHOTO CREDIT: GREAT LOTUS

EPMS

Environmentally preferred materials (EPMS) play a key part in the company's overall business model. Great Lotus produces its Pedair urethane foams using the most efficient, health conscientious and employee friendly methods. That they are also as environmentally friendly as possible goes without saying. For instance, it uses non toxic ether type MDI isocyanate to make all its foams. No harmful gases are released during production which is safer for the workforce and better for the environment.

Right from the very start, recycled material has been incorporated into all foam production. This recycled content includes ground rubber from old tyres and ground PU scrap. The foam is carefully formulated to maintain performance characteristics so that the physical properties are not affected by the recycled content. Whilst the standard regrind content is 5%, as much as 10% can be offered on request. By achieving this higher level, Great Lotus believes that it is the first company supplying the industry to achieve this. Foams at this level of recycled content still meet all required physical properties and have been accepted by brand leaders as qualifying as EPMS.

While many products are straight-

forward single formula foam mouldings, others are produced by laminating different formulations and including foam to fabric for covers, etc. All laminating operations are carried out using water-based adhesive, no solvents are used anywhere in the factory, a further example of making the product more environmentally friendly and reducing the risk to employees' health and well being.

NATURAL 30

Great Lotus is also producing open cell foams using a soy-based polyol called Natural 30 with similar properties to those made with 100% petroleum-based polyol. The current replacement using sol-based content is 30% but research is ongoing to further reduce the reliance upon petroleum based-polyols.

Using soya bean oil does not have a negative impact on food supply for one very simple reason. The actual oil is only some 17%-20% of the total content extracted from a soya bean when it is crushed. Apart from a 3% rigid kernel, the remaining material that is extracted is protein meal that can be used to feed livestock. As a result, the more soy beans are crushed to get oil out of them, the more animal food for farmers is produced. Using more oil from soy beans in fact adds to this food source.

The source of the soya polyol used is

also quite significant: the US. So, why do this? The answer once again lies in its environmentally sympathetic philosophy. The supplier concerned is also highly responsible in the way it sources its raw materials. A company spokesman remarks, "We actively work with our raw material suppliers to make sure we only use soy farmed in the US. We do this because we know that in this region soy is farmed responsibly and there is no exploitation of people or destruction of the environment."

The Great Lotus factory in Dongguan was purpose built in 2006 to be environmentally responsible and efficient. Its foams and finished products are also as environmentally friendly and sustainable as possible and its management is dedicated to running its business with these aims in mind as well as offering its employees the best terms and working conditions as possible. There are still those in the footwear industry who use the excuse of remaining competitive in a global market in order to exploit both the environment and the people they employ. Whether they will remain with us long term remains to be seen. Great Lotus, on the other hand, has never cut any corners and yet has enjoyed rapid growth in the very same industry. Who says a responsible business philosophy does not pay? 🍀